## SINKHOLE AND SINKHOLE AREA TREATMENT

### PRACTICE INTRODUCTION

### USDA, Natural Resources Conservation Service—Practice Code 527



# SINKHOLE AND SINKHOLE AREA TREATMENT

Sinkhole and sinkhole area treatment is the treatment of sinkholes to reduce contamination of ground water resources and/or improve farm safety through the establishment of vegetative buffers, fencing, control of surface waters, and sometimes filtering the water entering or plugging the sinkhole.

### PRACTICE INFORMATION

This practice is applied on any land where the soils and geologic conditions have led to the development of sinkholes. The primary purpose of sinkhole and sinkhole area treatment is to improve water quality and/or farm safety.

Implementation of the practice usually involves:

- Removing trash and other materials from the sinkhole
- Establishing vegetative buffers
- Fencing the sinkhole and buffer area
- Developing nutrient and pest management plans for the drainage area

• Installing a filter or plug in the sinkhole when an open sinkhole poses a safety hazard

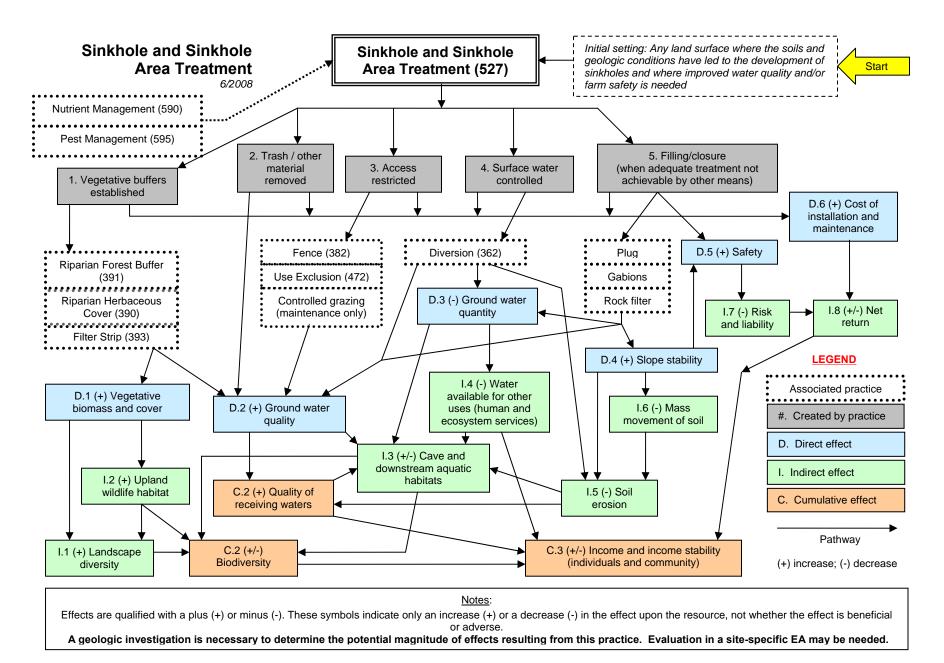
A geologic investigation of the potential impacts of the treatment on ground water, surface water, and the karst features is required and must be conducted by a qualified geologist. Other considerations are the diversion of excess surface waters, use of appropriate erosion and sedimentation control measures, and changes to the volume of surface water, which may disturb underground hydrology.

#### COMMON ASSOCIATED PRACTICES

Sinkhole and Sinkhole Area Treatment is commonly used in a Conservation Management System with Nutrient Management (590), Pest Management (595), Fence (382), Use Exclusion (472), Diversion (362), and vegetative buffer practices.

For further information, refer to the practice standard in the NRCS Field Office Technical Guide and associated specifications and design criteria.

The following page identifies the effects expected to occur when this practice is applied. These effects are subjective and somewhat dependent on variables such as climate, terrain, soil, etc. All appropriate local, State, Tribal, and Federal permits and approvals are the responsibility of the landowners and are presumed to have been obtained. Users are cautioned that these effects are estimates that may or may not apply to a specific site.



The diagram above identifies the effects expected to occur when this practice is applied according to NRCS practice standards and specifications. These effects are subjective and somewhat dependent on variables such as climate, terrain, soil, etc. All appropriate local, State, Tribal, and Federal permits and approvals are the responsibility of the landowners and are presumed to have been obtained. All income changes are partially dependent upon market fluctuations which are independent of the conservation practices. Users are cautioned that these effects are estimates that may or may not apply to a specific site.